

NOV 17 2008

PTOL-413A (08-08)

Approved for use through 09/30/2008. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

## Applicant Initiated Interview Request Form

Application No.: 10/796,118 First Named Applicant: Harada  
 Examiner: Liu Art Unit: 2613 Status of Application: After RCE

## Tentative Participants:

(1) Liu (2) Whitham  
 (3) \_\_\_\_\_ (4) \_\_\_\_\_

Proposed Date of Interview: 11/18 or 11/20 Proposed Time: PM (AM/PM)

## Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☐ NO

If yes, provide brief description: \_\_\_\_\_

## Issues To Be Discussed

Issues (Rej., Obj., etc.)	Claims / Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>obj. Rej 112</u>	<u>1-16, 20-21</u>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) <u>103</u>	<u>1-16 20-21</u>	<u>AAPA; majima</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	<u>nakamura</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	<u>Miyazaki</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Continuation Sheet Attached

## Brief Description of Arguments to be Presented:

see attached proposed topics and claim revisions

An interview was conducted on the above-identified application on \_\_\_\_\_

**NOTE:** This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Applicant / Applicant's Representative Signature

Michael E. Whitham

Typed/Printed Name of Applicant or Representative

32,635

Registration Number, if applicable

Examiner / SPE Signature

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED  
CENTRAL FAX CENTER

NOV 17 2008

In re patent application of:

Shigekazu Harada

Confirmation No. 2471

Serial No. 10/796,118

Group Art Unit: 2613

Filed: March 10, 2004

Examiner: Liu, Li

For: WAVELENGTH DIVISION MULTIPLEXING TRANSMISSION  
SYSTEMS AND REMOTE APPARATUS AND STATION  
APPARATUS USED THEREIN

Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

## TOPICS FOR INTERVIEW

## Proposed Claim Amendments

1. (Currently amended) A wavelength division multiplexing transmission system in which a plurality of remote apparatuses are connected to a station apparatus which communicates with the said remote apparatuses using a given plurality of wavelengths, wherein each of the said remote apparatuses comprises:

~~wavelength selecting means which selects a wavelength;~~

wavelength separating means which separates ~~an optical signal of a selected wavelength from an optical signal including~~ a plurality of wavelengths;

signal output means which outputs a reception status signal indicating whether or not ~~an a separated optical signal of the separated wavelength is~~ received from the wavelength separating means;

wavelength control means which determines whether the separated ~~selected~~ wavelength is ~~a-used~~ wavelength or ~~an~~ unused wavelength on the basis

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

of the reception status signal, and if the separated wavelength is unused wavelength, determines the separated wavelength as an available wavelength, and only if the separated wavelength is used wavelength, controls the wavelength separating means to separate an another wavelength ~~controls the wavelength selecting means until the unused wavelength is selected by the wavelength selecting means; and~~

optical transmitting means which transmits an optical signal of the unused wavelength determined by the said wavelength control means.

2. (Currently amended) The wavelength division multiplexing transmission system according to claim 1, wherein the said wavelength control means sets the unused wavelength as a transmission and reception signal and outputs a wavelength control signal for setting the unused wavelength.

3. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the wavelength control means determines a wavelength of an unreceived optical signal as the unused wavelength and sets the unused wavelength as a transmission and reception wavelength to be used in the remote apparatus.

4. (Currently amended) The wavelength division multiplexing transmission system according to claim 1, wherein the wavelength control means determines a wavelength of a received optical signal as the unused wavelength and sets the unused wavelength as a transmission and reception signal wavelength to be used in the remote apparatus.

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

5. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the station apparatus comprises optical control means which determines a wavelength to be used, on the basis of an optical signal received from the remote apparatus.
6. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the station apparatus is arranged to prevent an optical signal having the same wavelength as an unreceived wavelength from being outputted and outputs an optical signal having the same wavelength as a received wavelength.
7. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the station apparatus comprising:
- wavelength demultiplexing means which demultiplexes a wavelength of a received optical signal;
  - optical receiving means which receives an optical signal demultiplexed by the wavelength demultiplexing means;
  - optical output control means which determines, as a transmission wavelength, an optical signal having the same wavelength as that of an optical signal received by the optical receiving means;
  - optical transmitting means which transmits an optical signal having the transmission wavelength determined by the optical output control means; and
  - wavelength multiplexing means which multiplexes the wavelength of the optical signal transmitted by the optical transmitting means.
8. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein each of the remote apparatuses and the station apparatus are connected with each other through optical branching and coupling means.

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

9. (Previously presented) The wavelength division multiplexing transmission system according to claim 8, wherein the optical branching and coupling means is an optical coupler.
10. (Previously presented) The wavelength division multiplexing transmission system according to claim 8, wherein the optical branching and coupling means is a wavelength demultiplexing and multiplexing means.
11. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the plurality of remote apparatuses and the station apparatus are connected in a star topology.
12. (Previously presented) The wavelength division multiplexing transmission system according to claim 1, wherein the plurality of remote apparatuses and the station apparatus are connected in a tree topology.
13. (Currently Amended) A remote apparatus in a wavelength division multiplexing transmission system in which a plurality of remote apparatuses are connected to a station apparatus and communication is performed among the remote apparatuses and the station apparatus using a given plurality of wavelengths, said remote apparatus comprising:
- ~~wavelength selecting means which selects a wavelength;~~
  - wavelength separating means which separates ~~an optical signal of a~~ selected wavelength from ~~an optical signal including~~ a plurality of wavelengths;
  - signal output means which outputs a reception status signal indicating whether or not ~~an the separated~~ optical signal of the separated wavelength is received from the wavelength separating means;
  - wavelength control means which determines whether the separated selected wavelength is a used wavelength or ~~an unused~~ wavelength on the basis of the reception status signal, and if the separated wavelength is unused

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

wavelength, determines the separated wavelength as an available wavelength,  
and only if the separated wavelength is used wavelength, controls the  
wavelength separating means to separate an another wavelength controls the  
~~wavelength selecting means until the unused wavelength is selected by the~~  
~~wavelength selecting means; and~~

optical transmitting means which transmits an optical signal of the  
unused wavelength determined by the wavelength control means.

14. (Previously presented) The remote apparatus according to claim 13, wherein  
the wavelength control means sets the unused wavelength as a transmission and  
reception signal and generates and outputs a wavelength control signal for  
setting the unused wavelength.

15. (Previously presented) The remote apparatus according to claim 13, wherein  
the wavelength control means determines the wavelength of an unreceived  
optical signal as the unused wavelength and sets the unused wavelength as a  
transmission and reception wavelength.

16. (Currently amended) The remote apparatus according to claim 13, wherein  
the wavelength control means determines the wavelength of a received optical  
signal as the unused wavelength and sets the unused wavelength as a  
transmission and reception signal wavelength.

17 -19. (Canceled).

20. (currently amended) A method for adding a remote apparatus to a  
wavelength division multiplexing transmission system in which a plurality of  
remote apparatuses are connected to a station apparatus and communication is  
performed among the remote apparatuses and the station apparatus using a  
given plurality of wavelengths, said method comprising:

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

selecting a wavelength;  
separating an optical signal of a selected wavelength ~~from form an optical~~  
~~signal including~~ a plurality of wavelengths;  
outputting a reception status signal indicating whether or not ~~an a~~  
~~separated~~ optical signal ~~of the separated wavelength~~ is received;  
determining whether the ~~separated~~ selected wavelength is ~~a-used~~  
wavelength or ~~an~~ unused wavelength on the basis of said reception status signal;  
controlling the wavelength ~~separating~~ selecting means ~~to separate an~~  
~~another wavelength only if the separated wavelength is used wavelength until~~  
~~the unused wavelength is selected by the selecting step~~; and  
transmitting an optical signal of the unused wavelength determined by  
the determining step.

21. (Previously presented) The method according claim 20, further comprising:

generating and outputting, based on a result of the determining step, a  
wavelength control signal for setting the unused wavelength; and  
setting, based on the wavelength control signal, the unused wavelength as  
a transmission and reception signal.

Objection-Claim 20 is amended to remove "a selected wavelength form an  
optical"

112- Claims 1, 13, and 20 amendments remove the elements of "wavelength  
selecting means" and "selecting a wavelength"

Prior Art

AAPA (Figure 1 and background)

Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

AAPA relates to a wavelength division multiplexing transmission system. There is not teaching in AAPA of a signal output means, wavelength control means, and optical transmitting means

U.S. Patent 6,101,014 to Majima

Majima teaches that an optical node sweeps an optical signal over a rangw of wavelengths from Lamda Min to Lamda Max and detects the wavelength disposition of existing wavelengths. Next, the optical node sets a wavelength for transmission using the detection result so that the wavelength is spaced by the required channel spacing ( $\Delta \text{Lambda}$ ) for an existing wavelength on one end of any group of existing wavelengths (see column 12, lines 4-10; column 13, lines 62-67)

Majima does not teach anything about the element of "wavelength control means which determines whether the separated wavelength is used wavelength or unused wavelength on the basis of the reception status signal, and if the separated wavelength is unused wavelength, determines the separated wavelength as an available wavelength, and ONLY if the separated wavelength is used wavelength, controls the wavelength separating means to separate an another wavelength".

U.S. Patent 5,212,577 to Nakamura

Nakamura teaches a variable wavelength filter 55 always sweeps a range between the wavelengths Lambds A and Lambda B and to receive singals, thereby beginning to check whether or not an acknowledgement signal for transmission (column 6, lines 43-55). Figures 3 and 9 also show that all wavelengths between Lambda A and Lambda B are separated and checked whether each wavelength is used or unused.

In Nakamura, a variable wavelength filter 5 always separates all wavelengths from Lambda A to Lambda B. Thus, like Majima, Nakamura does not teach the element of "wavelength control means which determines whether



Attorney Docket No. 00380377AA

Application Serial No. 10/796,118

the separated wavelength is used wavelength or unused wavelength on the basis of the reception status signal, and if the separated wavelength is unused wavelength, determines the separated wavelength as an available wavelength, and ONLY if the separated wavelength is used wavelength, controls the wavelength separating means to separate an another wavelength".

Respectfully submitted,

Michael E. Whitham  
Reg. No. 32,635

Whitham, Curtis, Christofferson and Cook, P.C.  
11491 Sunset Hills Road, Suite 340  
Reston, VA 20190  
Tel. (703) 787-9400  
Fax. (703) 787-7557

Customer No. 30743